

**REMARKS**

Reconsideration and allowance in view of the foregoing amendments and the following remarks is respectfully requested.

Claim 1 remains pending in the application.

Claim 1 is objected to because of the noted informalities. In response, claim 1 has been amended to spell out the acronyms and to remove the adapted to language in the claims. Accordingly, this objection should be withdrawn.

Claim 1 is rejected under 35 USC §102(e) as being anticipated by Amin et al. (US 6714987 B1). Applicant respectfully traverses this rejection.

In order to better understand the present patent application, Applicant will refer to the notation used by Amin. Amin uses the NSF and LSF relating to the Network Service Function Layer and Local Service Function. In the present patent application, Applicant does not use NSF functions in the organization that is claimed in the present patent application.

In fact in present patent application, the main idea is to use functions which are decentralized towards the Local Service Function of LSF, and adding to this function the possibility to take into account the topologies being then created. The topology of the network can change or be modified because the mobility of the users connected at  $t$  and at  $t+1$ .

In the present patent application, the LSF comprises LOC, QSM, ACS and the block comprising the network connectivity for the users and the connectivity towards external units. These functions have characteristics allowing the decentralization of the network functions. Then it is possible to manage the topology that is not centralized, but whose configuration evolves according the mobility of nodes and the new connexions between the nodes. Claim 1 has been amended to recite that the control block is mobile, to respond to the Examiner's comment that this limitation was not present in the claims but was present in the Specification. Previously, claim 1 was amended to recite mobility in the preamble.

The main difference between the object claimed in the present patent application and the teaching of Amin is that:

- Amin all the functions are centralized,
- In the present patent application, the functions are decentralized over all the nodes of the network.

Functions that are necessary to obtain a decentralized management and to take into account the mobility of the users are: the identification, the location of users which connects the network, the decentralized management of these users, such management comprising the authentication, the address IP, the configuration, the user's table, and also the Quality of Service for the communications that are established between the users.

If a comparison is made between Amin and the present patent application, that is as if the functions NSF of Amin are decentralized and mobile. Contrary, in Amin, this is the LSF that can be eventually mobile but in relation to the NSF, the NSF not mobile.

This is the main technical difference, because in the present patent application there is no central point in charge of treatment relating to the mobility. Because the failing of a central point able to treat the mobility, it is necessary to use specific technique: location, routing, according the topologies and the resources that are free, routing according to the services to be interconnected, decentralized table of users, authentication of local users.

Amin does not disclose the management of the topology according the the mobility of nodes that host the server.

#### Control components

The control components interact with the components described above, for example, according to the users connected and authenticated the location of the users, and the service requests from the users.

The control components are:

The **ACS** component whose function is to process the: authentication of the users connected to the network, the dynamic configuration of the IP addresses, the

management of authorizations for service requests from users, the configuration of the components according to the authenticated users (quality of service QoS rules, filtering users, etc.).

The ACS component can also be used to control rights of access to and/or use of a service, for example, message transmission. This check can be performed at the transmitting source, at the reception, etc.

The ACS component allows to temporally synchronizing each clock in each terminal, and the devices implemented in the network and in data transmission.

The **LOC** component whose function is to process: the process of affiliation of the users, server mobility, user location and application-oriented service routing. Then from this passage, it can be deduced that the system takes into account the mobility of the nodes connected to the network at a given time.

**Conclusion**

All objections and rejections having been addressed, it is respectfully submitted that the present application should be in condition for allowance and a Notice to that effect is earnestly solicited.

Early issuance of a Notice of Allowance is courteously solicited.

The Examiner is invited to telephone the undersigned, Applicant's attorney of record, to facilitate advancement of the present application.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 07-1337 and please credit any excess fees to such deposit account.

Respectfully submitted,

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